

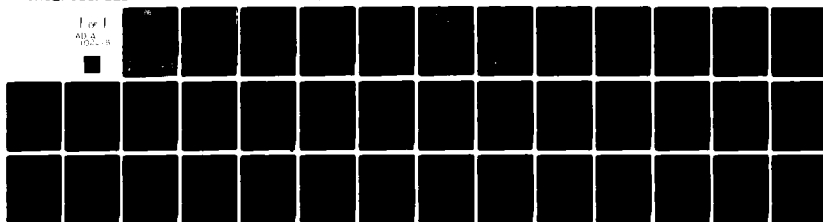
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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS-ETC F/G 4/2  
19308A MLRS, MISSILE NUMBER BC001, V02-003, BC002, ROUND NUMBER-ETC(U)  
JAN 81 D C KELLER  
ERADCOM/ASL-DR-1186

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June 1981

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## METEOROLOGICAL DATA REPORT

19308A MLRS

Missile No. BC001/V02-003/BC002

Round No. V152/MD-19/V153/MD-20/V154/MD-21

17 June 1981

by

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ATMOSPHERIC SCIENCES LABORATORY  
WHITE SANDS MISSILE RANGE, NEW MEXICO

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19308A MLRS, Missile No. BC001, V02-003, and BC002, Round No. V152/MD-19, V153/MD-20, and V154/MD-21 presented in tabular form.		

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## INTRODUCTION

19308A MLRS, Missile Numbers BC001, V02-003, and BC002, Round Numbers V152/MD-19, V153/MD-20, and V154/MD-21, were launched from BRILLO, White Sands Missile Range (WSMR), New Mexico, at 1019, 1019:05, and 1019:09 MDT, 17 June 1981. The scheduled launch times were 1000, 1000:04.5 and 1000:09 MDT.

## DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

### 1. Observations:

#### a. Surface

(1) Standard surface observations to include pressure, temperature ( $^{\circ}\text{C}$ ), relative humidity, dew point ( $^{\circ}\text{C}$ ), density ( $\text{gm}/\text{m}^3$ ), wind direction and speed, and cloud cover were made at the D-3 1/2 Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

#### b. Upper Air:

(1) Low level wind data were obtained from Double Theodolite pibal observation at:

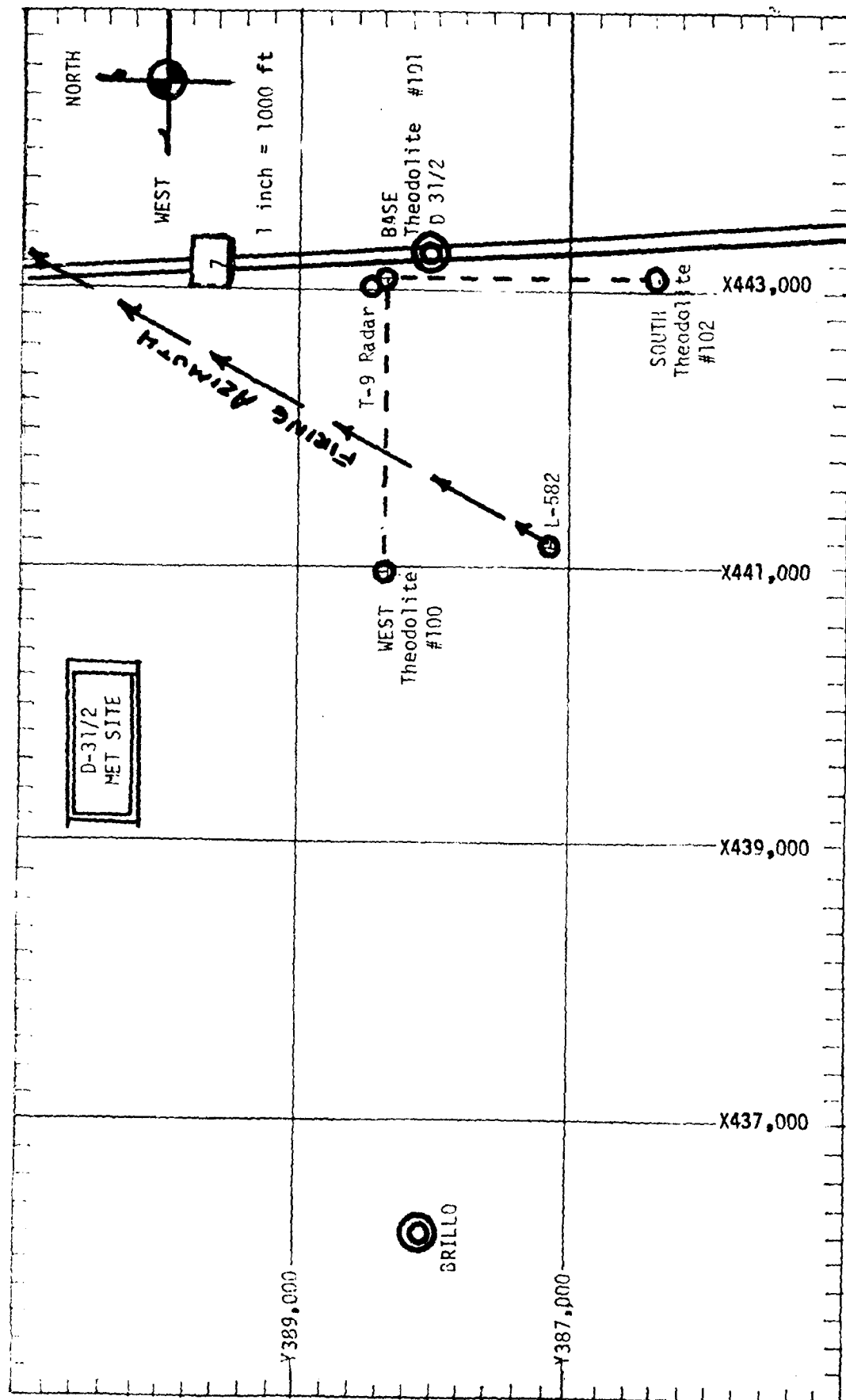
## SITE AND ALTITUDE

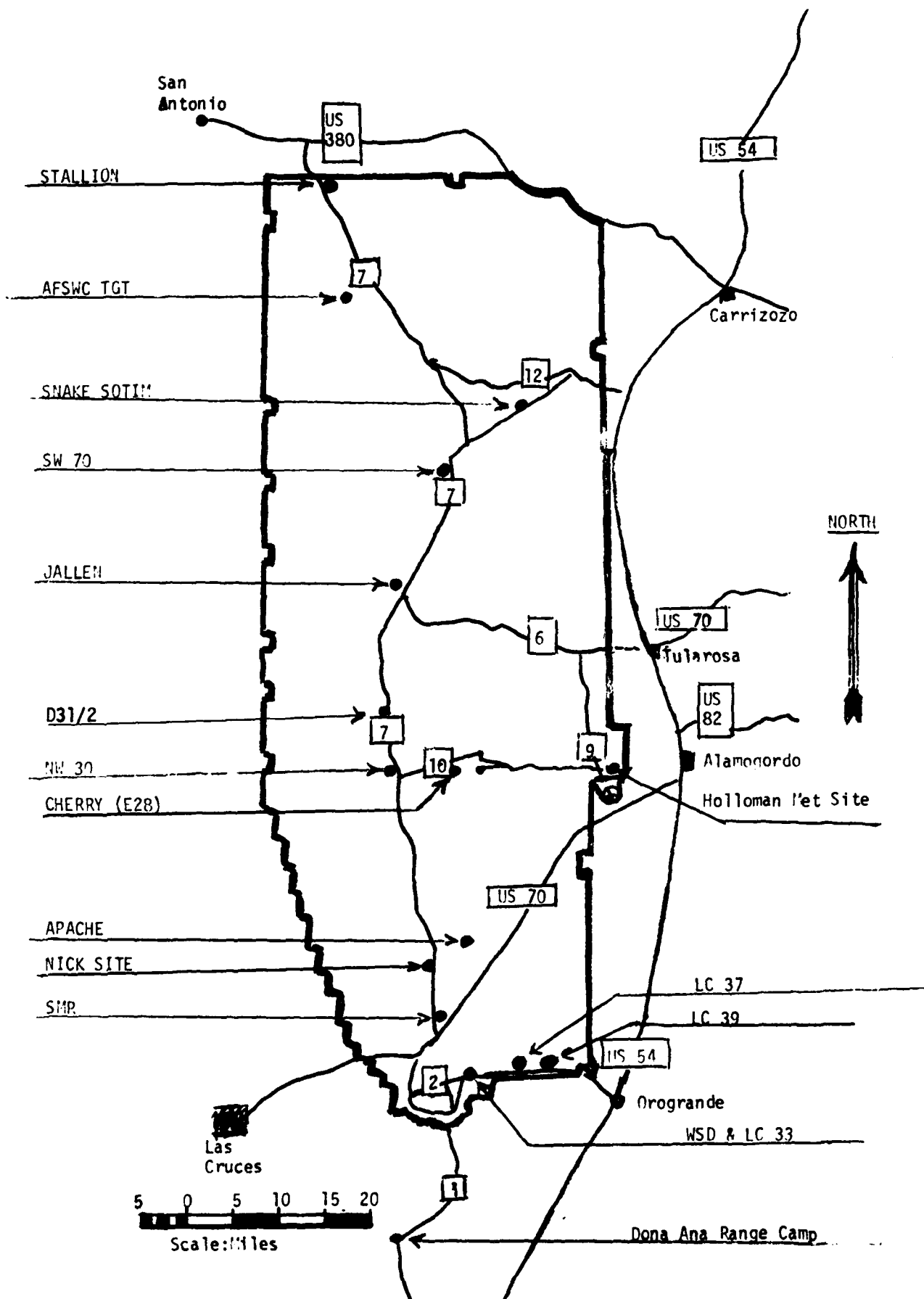
D-3 1/2      1750 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

## SITE AND TIME

HMS	0100 MDT
NW-30	0700 MDT
E-28	0800 MDT
E28	1000 MDT







# REPORT OF SURFACE OBSERVATION

TABLE 1  
 DATE 17 June 1981  
 DAY MONTH YEAR  
 STATION D-3 1/2  
 X= 443,093.12 Y= 388,317.32 H= 3964.34

TIME M D Y	PRESSURE mbs	TEMPERATURE OF °C	DEW POINT OF °F	RELATIVE HUMIDITY %	DENSITY gm/m <sup>3</sup>	WIND			VISIBIL- ITY
						DIRECTION degs	Speed kts	CHARACTER kts	
1000	893.8	24.7	3.0	24	1040	090	04		50

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	HGT	AMT	TYPE	HGT	
NONE							

## PSYCHROMETRIC COMPUTATION

TIME: MDT	1000	
DRY BULB TEMP.	24.7	
WET BULB TEMP.	12.5	
WET BULB DEPR.	12.2	
DEW POINT	03.0	
RELATIVE HUMID.	24	

TABLE 2

## MLRS PILOT-BALLOON MEASURED AVERAGE LAYER WINDS

RELEASED FROM DOG 3 1/2 DATE 17 June 1981 TIME 1005 MST      MDT X

BASE THEODOLITE: X= 443,093.12 Y= 388,317.32 H= 3964.34

METHOD OF DATA COLLECTION: T-9 Radar            S/T            OTHER D/T

LAYER LIMITS (METERS)	LAYER MID- POINT (METERS)	DIRECTION DEGREES TN	SPEED KTS
	Surface		CALM
120-180	150	144	03
180-240	210	144	04
240-300	270	144	04
300-360	330	151	03
360-420	390	222	02
420-580	500	299	07
580-720	650	300	09
720-880	800	274	06
880-1020	950	260	06
1020-1280	1150	216	08
1280-1420	1350	204	09
1420-1680	1550	193	09
1680-1820	1750	144	06
1820-2180	2000	MISG	MISG

TABLE 3

## AIMING AND T-TIME COMPUTER MET MESSAGE

HMS	01000 MDT	NW-30	0700 MDT
METCM1329061		METCM1329065	
170700126881		171300122885	
00338008	29100881	00267003	29020885
01327016	29260871	01543002	28960875
02278024	29350846	02308007	28860849
03262015	29040807	03322007	28800810
04282005	28650761	04377006	28530763
05015004	28260716	05159002	28220719
06011011	28190674	06051014	28230677
07168006	28010635	07075007	28000637
08108011	27760597	080614002	27740599
09052011	27410561	09081007	27340563
10520007	27080527	10530008	27100529
11488007	26750495	11453007	26760496
12630009	26220449	12604007	26250451
13067009	25410394	13585004	25400395
14090010	24600344	14591006	24550345
15065007	23740299	15567006	23630299
16600007	22910258	16630004	22760258
17457024	22270222	17457015	22100222
18446035	21780190	18454034	21710190
19446035	21280162	19465033	21280162
20453029	20790138	20490030	20810138
21492016	20600117	21527021	20490117
22534014	20240099	22569011	20220099
23578010	20010084	23220003	20250084
24145007	20510071	24238007	20560071
25204012	20870060	25156006	21060060
26145015	21280051	26184016	21290051

TABLE 4

## AIMING AND T-TIME COMPUTER MET MESSAGES

E-28 0800 MDT

METCM1329064

171400119895

00000000	28910895
01619005	28930884
02287010	28890858
03331009	28870819
04371007	28600772
05312005	28260727
06072012	28280684
07078009	28060644
08614005	27780606
09582008	27410570
10532010	27180535
11444008	26880502
12061008	26350456
13584004	25500400
14591005	24600349
15562006	23700303
16562004	22850262
17461017	22260225
18455033	21830193
19467035	21390165
20501030	20980141
21522017	20670120
22588009	20350101
23219005	20540086
24245006	20730073
25191009	21150062
26175017	21490053

E-28 1000 MDT

METCM1329064

171600119894

00000000	29370894
01263003	29230883
02309007	29120858
03383004	29030819
04345006	28750772
05184004	28470727
06092010	28330685
07051010	28070645
08576006	27840606
09570008	27440570
10519007	27250536
11451012	26940503
12535007	26440457
13502004	25620401
14551006	24770350
15560007	23880305
16565006	23050264
17482016	22410227
18456034	21970195
19454036	21500166
20477029	21090142
21507017	20870121
22597010	20480102
23183002	20380087
24303007	20700074
25179008	21100063
26189014	21540053

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

SIGNIFICANT LEVEL DATA

1680010133  
HOLLOWMAN

TABLE 5

STATION ALTITUDE 4126.59 FEET MSL  
17 JUNE 81 0100 HRS EDT  
ASCENSION NO. 133

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
880.8	4126.6	17.0	.6	33.0
857.0	4898.3	20.7	3.0	31.0
850.0	5130.5	19.7	2.6	32.0
700.0	10499.2	7.2	-5.1	41.0
672.6	11573.7	8.8	-10.1	25.0
645.8	12683.1	6.9	-12.2	24.0
610.0	14218.3	5.3	-14.1	23.0
580.6	15536.7	2.2	-17.3	22.0
500.0	19449.6	-5.3	-20.9	28.0
454.2	21906.6	-10.4	-26.6	25.0
400.0	25075.8	-18.5	-33.2	26.0
366.6	27195.5	-23.5	-37.2	27.0
300.0	31905.2	-35.6	-47.5	28.0
289.8	32694.2	-37.7	-49.1	29.0
250.0	35990.4	-46.0		
239.0	36971.5	-48.3		
223.2	38449.2	-50.2		
200.0	40788.9	-54.3		
187.2	42182.3	-55.5		
150.0	46756.7	-63.1		
138.0	48436.6	-65.0		
123.0	50737.6	-66.3		
108.2	53285.7	-68.6		
100.0	54835.6	-70.7		
85.4	57899.8	-73.9		
77.8	59701.7	-72.5		
75.2	60367.6	-68.6		
70.0	61785.7	-68.4		
50.0	68595.6	-59.5		
39.6	73469.2	-55.0		
30.0	79363.1	-52.9		
24.4	83806.6	-49.5		
20.0	88119.7	-49.3		
17.2	91397.3	-48.8		
14.2	95604.0	-45.0		
10.0	103394.8	-43.5		
9.7	104074.4	-43.3		

STATION ALTITUDE 4126.59 FEET MSL  
17 JUNE 81  
ASCENSION NO. 133

UPPER AIR DATA  
1680010133  
HOLLOMAN  
TABLE 6

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4126.6	890.8	17.0	.6	33.0	1054.6	664.5	190.0	8.0	1.000264
4500.0	869.2	18.8	1.8	32.0	1034.1	666.7	176.9	10.1	1.000261
5000.0	853.9	20.3	2.8	31.4	1010.5	668.4	166.6	13.5	1.000258
5500.0	838.7	18.8	2.1	32.6	997.4	666.8	160.5	17.1	1.000254
6000.0	823.7	17.7	1.4	33.5	983.6	665.4	156.2	18.1	1.000250
6500.0	808.9	16.5	.7	34.3	969.9	664.0	150.5	15.5	1.000245
7000.0	794.4	15.3	.0	35.1	956.5	662.7	147.6	12.7	1.000241
7500.0	780.2	14.2	-7.7	36.0	943.2	661.3	146.9	9.9	1.000237
8000.0	766.2	13.0	-1.4	36.8	930.2	659.9	148.5	7.1	1.000233
8500.0	752.5	11.9	-2.1	37.6	917.4	658.6	153.8	4.3	1.000229
9000.0	739.0	10.7	-2.9	38.5	904.7	657.2	149.4	1.9	1.000225
9500.0	725.8	9.5	-3.6	39.3	892.2	655.8	22.2	.6	1.000221
10000.0	712.8	8.4	-4.4	40.2	879.9	654.4	6.4	3.8	1.000217
10500.0	700.0	7.2	-5.2	41.0	867.8	653.0	5.5	7.1	1.000213
11000.0	687.2	7.9	-7.1	33.5	850.0	653.8	4.8	10.2	1.000207
11500.0	674.6	8.7	-9.7	26.1	832.5	654.6	5.3	11.6	1.000199
12000.0	662.3	8.1	-10.9	24.6	819.2	653.8	8.3	9.4	1.000195
12500.0	650.2	7.2	-11.9	24.2	806.7	652.8	20.5	7.1	1.000192
13000.0	638.2	6.6	-12.6	23.8	793.8	652.0	48.1	5.6	1.000188
13500.0	626.5	6.0	-13.2	23.5	780.7	651.4	48.9	7.9	1.000185
14000.0	615.0	5.5	-13.9	23.1	767.8	650.8	47.9	10.4	1.000181
14500.0	603.6	4.6	-14.8	22.8	756.0	649.7	42.8	11.8	1.000178
15000.0	592.4	3.5	-16.0	22.4	745.2	648.3	39.3	12.5	1.000175
15500.0	581.4	2.3	-17.2	22.0	734.6	646.9	37.4	10.5	1.000172
16000.0	570.4	1.3	-17.6	22.7	723.3	645.7	32.6	8.2	1.000169
16500.0	559.6	.4	-18.1	23.5	712.1	644.6	14.1	5.3	1.000166
17000.0	549.0	-.6	-18.5	24.2	701.1	643.5	333.7	4.0	1.000163
17500.0	538.7	-1.6	-19.0	25.0	690.3	642.3	297.8	5.3	1.000161
18000.0	528.5	-2.5	-19.4	25.8	679.6	641.2	284.5	7.2	1.000158
18500.0	518.5	-3.5	-19.9	26.5	669.2	640.0	279.9	8.9	1.000156
19000.0	508.7	-4.4	-20.4	27.3	658.9	638.9	277.3	8.2	1.000153
19500.0	499.0	-5.4	-21.0	27.9	648.7	637.7	274.3	6.7	1.000151
20000.0	489.4	-6.4	-22.2	27.3	638.7	636.5	278.0	3.7	1.000148
20500.0	479.9	-7.5	-23.3	26.7	628.8	635.2	313.5	1.1	1.000145
21000.0	470.6	-8.5	-24.5	26.1	619.1	634.0	345.0	3.8	1.000142
21500.0	461.5	-9.6	-25.6	25.5	609.5	632.7	349.6	6.6	1.000140
22000.0	452.5	-10.6	-26.8	25.0	600.2	631.4	349.3	9.7	1.000137
22500.0	443.5	-11.9	-27.8	25.2	591.1	629.8	350.2	12.0	1.000135
23000.0	434.7	-13.2	-28.8	25.3	582.3	628.3	355.6	11.5	1.000133
23500.0	426.1	-14.5	-29.9	25.5	573.6	626.7	2.2	10.8	1.000131

STATION ALTITUDE 1420-59 Feet  
17 JUNE 81  
ASCENSION NO. 133

UPPER AIR DATA  
1680010133  
HOLLOWAY

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

TABLE 6 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
24000.0	417.6	-15.8	-30.9	25.7	565.0	625.2	13.1		9.6	1.000128
24500.0	409.3	-17.0	-32.0	25.8	556.6	623.6	25.0		9.0	1.000126
25000.0	401.2	-18.3	-33.0	26.0	548.3	622.0	33.5		9.2	1.000124
25500.0	393.1	-19.5	-34.0	26.2	539.7	620.6	41.1		9.4	1.000122
26000.0	385.1	-20.7	-34.9	26.4	531.2	619.1	47.1		9.2	1.000120
26500.0	377.2	-21.9	-35.9	26.7	522.8	617.7	51.8		9.2	1.000118
27000.0	369.6	-23.0	-36.8	26.9	514.6	616.2	51.2		9.8	1.000116
27500.0	361.9	-24.3	-37.8	27.1	506.4	614.7	50.6		10.2	1.000114
28000.0	354.3	-25.6	-38.9	27.2	498.4	613.1	49.9		10.4	1.000112
28500.0	346.8	-26.9	-40.0	27.3	490.4	611.5	50.4		10.0	1.000110
29000.0	339.5	-28.1	-41.1	27.4	482.6	609.9	52.6		9.1	1.000109
29500.0	332.3	-29.4	-42.2	27.5	474.9	608.3	50.7		8.6	1.000107
30000.0	325.3	-30.7	-43.3	27.6	467.4	606.6	45.2		8.6	1.000105
30500.0	318.5	-32.0	-44.4	27.7	460.0	605.0	42.7		8.5	1.000103
31000.0	311.8	-33.3	-45.5	27.8	452.7	603.4	42.3		8.2	1.000102
31500.0	305.2	-34.6	-46.6	27.9	445.6	601.8	41.1		7.7	1.000100
32000.0	298.8	-35.9	-47.7	28.1	438.5	600.2	38.8		7.0	1.000098
32500.0	292.3	-37.2	-48.7	28.8	431.5	598.5	35.2		6.3	1.000097
33000.0	285.9	-38.5	-50.6	26.3**	424.3	596.8	28.3		5.9	1.000095
33500.0	279.5	-39.7	-53.2	21.9**	417.1	595.2	19.4		5.7	1.000093
34000.0	273.3	-41.0	-56.1	17.5**	410.1	593.6	4.3		5.7	1.000092
34500.0	267.3	-42.2	-59.4	13.1**	403.2	592.0	35.1		6.3	1.000090
35000.0	261.3	-43.5	-63.6	8.7**	396.5	590.4	34.1		7.4	1.000088
35500.0	255.6	-44.8	-69.5	4.3**	389.8	588.7	33.2		7.9	1.000087
36000.0	249.9	-46.0			383.3	587.1	32.1		7.9	1.000085
36500.0	244.2	-47.2			376.5	585.6	29.5		8.1	1.000084
37000.0	238.7	-48.3			369.9	584.1	27.0		10.4	1.000082
37500.0	233.2	-49.0			362.4	583.3	25.7		14.7	1.000081
38000.0	227.9	-49.6			355.2	582.5	25.4		20.1	1.000079
38500.0	222.7	-50.3			348.1	581.6	25.3		25.0	1.000078
39000.0	217.5	-51.2			341.3	580.4	25.5		28.6	1.000076
39500.0	212.5	-52.0			334.7	579.3	25.6		31.8	1.000075
40000.0	207.5	-52.9			328.3	578.1	25.6		33.4	1.000073
40500.0	202.7	-53.8			322.0	577.0	25.5		34.8	1.000072
41000.0	198.0	-54.5			315.4	576.1	25.2		35.1	1.000070
41500.0	193.4	-54.9			308.7	575.5	25.0		35.4	1.000069
42000.0	188.8	-55.3			302.0	575.0	24.9		35.3	1.000067
42500.0	184.3	-56.0			295.8	574.0	24.7		35.3	1.000066
43000.0	179.9	-56.9			289.8	572.9	24.8		35.2	1.000065
43500.0	175.6	-57.7			284.0	571.8	25.0		35.1	1.000063

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL  
17 JUNE 81  
ASCENSION NO. 133

UPPER AIR DATA  
1680010133  
HOLLOMAN

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

TABLE 6 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
44000.0	171.4	-58.5		278.2	570.7	251.1	35.3	1.000062
44500.0	167.3	-59.4		272.6	569.6	251.7	35.6	1.000061
45000.0	163.3	-60.2		267.2	568.5	252.1	35.8	1.000060
45500.0	159.4	-61.0		261.8	567.4	251.7	35.3	1.000058
46000.0	155.6	-61.8		256.5	566.3	251.2	34.8	1.000057
46500.0	151.9	-62.7		251.4	565.2	251.1	34.1	1.000056
47000.0	148.2	-63.5		246.3	564.1	251.1	33.3	1.000055
47500.0	144.6	-64.4		241.2	562.9	251.6	32.2	1.000054
48000.0	141.0	-65.2		236.3	561.7	252.9	30.8	1.000053
48500.0	137.6	-66.0		231.3	560.7	254.6	29.2	1.000052
49000.0	134.2	-66.1		225.7	560.6	258.4	26.2	1.000050
49500.0	130.9	-66.1		220.2	560.5	263.1	23.4	1.000049
50000.0	127.6	-66.2		214.8	560.4	265.4	21.7	1.000048
50500.0	124.5	-66.3		209.6	560.3	266.0	20.4	1.000047
51000.0	121.4	-66.5		204.7	560.0	267.2	19.0	1.000046
51500.0	118.4	-67.0		200.0	559.4	270.5	17.2	1.000045
52000.0	115.4	-67.4		195.5	558.8	274.6	15.4	1.000044
52500.0	112.6	-67.9		191.0	558.1	281.4	14.3	1.000043
53000.0	109.8	-68.3		186.7	557.5	290.2	13.7	1.000042
53500.0	107.0	-68.9		182.5	556.8	29.5	13.5	1.000041
54000.0	104.3	-69.6		178.5	555.9	301.5	13.9	1.000040
54500.0	101.7	-70.2		174.6	554.9	300.0	14.4	1.000039
55000.0	99.2	-70.9		170.8	554.1	300.0	14.7	1.000038
55500.0	96.6	-71.4		166.9	553.4	302.1	14.6	1.000037
56000.0	94.2	-71.9		163.0	552.6	304.1	14.6	1.000036
56500.0	91.8	-72.4		159.3	551.9	307.5	14.3	1.000035
57000.0	89.5	-73.0		155.7	551.2	311.6	13.9	1.000035
57500.0	87.2	-73.5		152.1	550.5	316.4	13.1	1.000034
58000.0	85.0	-73.8		148.5	550.0	324.2	10.9	1.000033
58500.0	82.8	-73.4		144.4	550.6	335.7	9.0	1.000032
59000.0	80.7	-73.0		140.4	551.1	354.4	6.9	1.000031
59500.0	78.6	-72.7		136.6	551.6	26.4	5.7	1.000030
60000.0	76.6	-70.8		131.9	554.2	55.3	6.2	1.000029
60500.0	74.7	-68.6		127.2	557.2	64.9	5.6	1.000028
61000.0	72.8	-68.5		124.0	557.3	76.2	5.3	1.000028
61500.0	71.0	-68.4		120.9	557.4	83.8	5.6	1.000027
62000.0	69.3	-68.1		117.7	557.8	88.6	6.1	1.000026
62500.0	67.6	-67.5		114.4	558.7	92.7	6.7	1.000025
63000.0	65.9	-66.8		111.3	559.6	96.8	8.4	1.000025
63500.0	64.3	-66.2		108.2	560.5	99.5	10.1	1.000024



STATION ALTITUDE 4126.59 FEET MSL  
17 JUNE 81  
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UPPER AIR DATA  
1680010133  
HOLLOMAN  
TABLE 6 CON'T

GEODETIC COORDINATES  
32.48865 LAT DEG  
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	62.7	-65.5		105.3	561.4	101.3	11.2	1.000023
64500.0	61.2	-64.9		102.4	562.3	102.8	11.1	1.000023
65000.0	59.7	-64.2		99.6	563.1	104.3	11.0	1.000022
65500.0	58.3	-63.5		96.8	564.0	101.7	10.8	1.000022
66000.0	56.8	-62.9		94.2	564.9	97.1	10.6	1.000021
66500.0	55.5	-62.2		91.6	565.8	92.4	10.5	1.000020
67000.0	54.1	-61.6		89.1	566.7	92.4	12.1	1.000020
67500.0	52.8	-60.9		86.6	567.5	92.5	13.7	1.000019
68000.0	51.5	-60.3		84.3	568.4	92.5	15.3	1.000019
68500.0	50.2	-59.6		82.0	569.3	92.5	16.9	1.000018
69000.0	49.0	-59.1		79.8	569.9	92.5	18.5	1.000018
69500.0	47.9	-58.7		77.8	570.6	92.9	18.6	1.000017
70000.0	46.8	-58.2		75.8	571.2	93.4	18.6	1.000017
70500.0	45.6	-57.7		73.8	571.8	94.8	19.1	1.000016
71000.0	44.6	-57.3		71.9	572.4	97.6	21.0	1.000016
71500.0	43.5	-56.8		70.1	573.0	99.9	22.9	1.000016
72000.0	42.5	-56.4		68.3	573.6	102.4	23.6	1.000015
72500.0	41.5	-55.9		66.5	574.2	104.9	23.8	1.000015
73000.0	40.5	-55.4		64.8	574.8	107.4	24.0	1.000014
73500.0	39.5	-55.0		63.1	575.4	106.8	22.6	1.000014
74000.0	38.6	-54.8		61.6	575.7	105.6	21.0	1.000014
74500.0	37.7	-54.6		60.1	575.9	104.3	19.5	1.000013
75000.0	36.8	-54.5		58.7	576.1	103.1	19.9	1.000013
75500.0	36.0	-54.3		57.3	576.4	101.9	20.3	1.000013
76000.0	35.1	-54.1		55.9	576.6	100.8	20.8	1.000012
76500.0	34.3	-53.9		54.6	576.8	100.2	21.3	1.000012
77000.0	33.5	-53.7		53.2	577.1	99.6	21.7	1.000012
77500.0	32.8	-53.6		52.0	577.3	99.4	22.2	1.000012
78000.0	32.0	-53.4		50.7	577.5	101.6	22.4	1.000011
78500.0	31.2	-53.2		49.5	577.8	103.8	22.7	1.000011
79000.0	30.5	-53.0		48.3	578.0	105.2	23.1	1.000011
79500.0	29.8	-52.8		47.1	578.3	103.0	23.4	1.000010
80000.0	29.1	-52.4		46.0	578.8	100.9	23.7	1.000010
80500.0	28.5	-52.0		44.8	579.3	98.5	24.0	1.000010
81000.0	27.8	-51.6		43.7	579.8	94.6	23.8	1.000010
81500.0	27.2	-51.3		42.6	580.3	90.6	23.8	1.000009
82000.0	26.5	-50.9		41.6	580.8	86.7	23.8	1.000009
82500.0	25.9	-50.5		40.6	581.3	86.0	24.1	1.000009
83000.0	25.3	-50.1		39.6	581.8	85.3	24.3	1.000009
83500.0	24.8	-49.7		38.6	582.3	84.7	24.5	1.000009

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

UPPER AIR DATA  
1680010133  
HOLLOWMAN  
TABLE 6 CON'T

STATION ALTITUDE 4126.59 FEET MSL  
17 JUNE 81 0100 HRS MDT  
ASCENSION NO. 133

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
84000.0	24.2	-49.5		37.7	582.6	84.5	25.2	1.000008
84500.0	23.6	-49.5		36.8	582.7	84.3	26.1	1.000008
85000.0	23.1	-49.4		36.0	582.7	84.2	27.0	1.000008
85500.0	22.6	-49.4		35.1	582.7	83.9	26.0	1.000008
86000.0	22.1	-49.4		34.3	582.7	83.3	23.7	1.000008
86500.0	21.6	-49.4		33.5	582.8	82.7	21.3	1.000007
87000.0	21.1	-49.4		32.8	582.8	80.3	19.6	1.000007
87500.0	20.6	-49.3		32.0	582.8	74.9	19.2	1.000007
88000.0	20.1	-49.3		31.3	582.9	69.3	18.9	1.000007
88500.0	19.7	-49.2		30.6	582.9	64.9	19.0	1.000007
89000.0	19.2	-49.2		29.9	583.0	69.3	20.5	1.000007
89500.0	18.8	-49.1		29.2	583.1	73.1	22.1	1.000006
90000.0	18.3	-49.0		28.5	583.2	76.4	23.8	1.000006
90500.0	17.9	-48.9		27.9	583.3	77.9	25.3	1.000006
91000.0	17.5	-48.9		27.2	583.4	79.1	26.9	1.000006
91500.0	17.1	-48.7		26.6	583.6	80.2	28.5	1.000006
92000.0	16.7	-48.3		25.9	584.2	79.2	29.6	1.000006
92500.0	16.4	-47.8		25.3	584.8	77.3	30.5	1.000006
93000.0	16.0	-47.4		24.7	585.4	75.4	31.4	1.000005
93500.0	15.6	-46.9		24.1	586.0	7.7	32.1	1.000005
94000.0	15.3	-46.4		23.5	586.6	7.6	32.2	1.000005
94500.0	14.9	-46.0		22.9	587.2	76.6	32.4	1.000005
95000.0	14.6	-45.5		22.3	587.7	77.6	32.6	1.000005
95500.0	14.3	-45.1		21.8	588.3	78.6	32.5	1.000005
96000.0	13.9	-44.9		21.3	588.5	79.6	32.5	1.000005
96500.0	13.6	-44.8		20.8	588.7	80.7	32.4	1.000005
97000.0	13.3	-44.7		20.3	588.8	81.9	32.2	1.000005
97500.0	13.0	-44.6		19.9	588.9	83.8	31.5	1.000004
98000.0	12.7	-44.5		19.4	589.0	85.9	30.9	1.000004
98500.0	12.5	-44.4		19.0	589.2	88.0	30.3	1.000004
99000.0	12.2	-44.3		18.6	589.3	90.1	29.7	1.000004
99500.0	11.9	-44.2		18.1	589.4	88.9	30.2	1.000004
100000.0	11.7	-44.2		17.7	589.5	87.7	30.8	1.000004
100500.0	11.4	-44.1		17.3	589.7	86.6	31.3	1.000004
101000.0	11.1	-44.0		16.9	589.8	85.5	31.8	1.000004
101500.0	10.9	-43.9		16.5	589.9			1.000004
102000.0	10.6	-43.8		16.2	590.0			1.000004
102500.0	10.4	-43.7		15.8	590.2			1.000004
103000.0	10.2	-43.6		15.4	590.3			1.000003
103500.0	10.0	-43.5		15.1	590.4			1.000003

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
104000.0	9.7	-43.3		14.8	590.6			1.000003

STATION ALTITUDE 4126.59 FEET MSL  
17 JUNE 81 0100 HRS MDT  
ASCENSION NO. 133

MANDATORY LEVELS  
1680010133  
HOLLOMAN  
TABLE 7

GEODETIC COORDINATES  
32.88865 LAT DEG  
106.09965 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5127.	19.7	2.6	32.	164.8	14.4
800.0	6827.	15.8	.3	35.	147.8	13.7
750.0	8611.	11.6	-2.2	38.	155.5	3.7
700.0	10489.	7.2	-5.1	41.	5.5	7.1
650.0	12495.	7.2	-11.9	24.	20.6	7.1
600.0	14644.	4.3	-15.2	23.	41.5	12.2
550.0	16945.	-5	-18.5	24.	337.4	4.0
500.0	19423.	-5.3	-20.9	28.	274.8	6.9
450.0	22108.	-11.0	-27.1	25.	349.2	10.5
400.0	25034.	-18.5	-33.2	26.	34.5	9.2
350.0	28253.	-26.3	-39.5	27.	49.6	10.4
300.0	31842.	-35.6	-47.5	28.	39.4	7.1
250.0	35912.	-46.0			322.3	7.9
200.0	40691.	-54.3			254.0	35.0
175.0	43480.	-57.8			250.5	35.1
150.0	46631.	-63.1			251.1	33.7
125.0	50271.	-66.3			265.9	20.7
100.0	54667.	-70.7			299.7	14.6
80.0	58967.	-72.9			1.	6.4
70.0	61575.	-68.4			86.	5.8
60.0	64638.	-64.3			103.8	11.0
50.0	68339.	-59.5			92.5	17.1
40.0	72967.	-55.2			107.3	23.5
30.0	79026.	-52.9			103.8	23.3
25.0	82911.	-49.9			85.0	24.4
20.0	87709.	-49.3			68.4	18.9
15.0	93925.	-46.1			76.3	32.4
10.0	102837.	-43.5				

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL  
17 JUNE 81  
ASCENSION NO. 48

SIGNIFICANT LEVEL DATA

1680220048  
NW 30

GEODETIC COORDINATES  
32.88497 LAT DEG  
106.49714 LON DEG

TABLE 8

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
884.9	4010.4	16.2	4.6	46.0
874.6	4337.0	15.5	3.0	43.0
850.0	5130.3	14.5	2.1	43.0
796.8	6921.7	13.7	.4	40.0
728.0	9398.4	8.5	-2.7	45.0
718.4	9758.6	7.7	-3.2	46.0
700.0	10462.4	8.3	-4.2	41.0
680.2	11242.5	9.0	-4.2	39.0
625.2	13523.5	5.6	-9.4	33.0
616.0	13922.1	5.6	-9.4	33.0
546.2	17110.7	-2.0	-16.1	33.0
520.8	18354.3	-2.6	-16.6	33.0
500.0	19411.7	-5.6	-19.3	33.0
456.2	21758.1	-9.8	-23.0	33.0
400.0	25039.9	-18.7	-30.3	35.0
346.2	28524.0	-27.3	-38.0	35.0
300.0	31855.8	-36.6	-46.7	34.0
282.2	33239.3	-40.7	-50.4	34.0
250.0	35919.2	-47.0		
220.0	38671.6	-53.0		
209.8	39680.1	-53.0		
200.0	40692.7	-54.7		
158.0	45594.5	-60.8		
150.0	46655.2	-62.7		
133.8	48960.1	-66.0		
119.2	51262.3	-67.8		
108.8	53064.9	-69.8		
100.0	54719.9	-70.4		
92.8	56176.7	-72.5		
70.0	61713.4	-67.6		
63.0	63832.1	-62.9		
50.4	68402.7	-60.0		
39.8	73343.1	-54.0		
30.0	79379.6	-51.3		
27.4	81320.2	-53.1		
20.8	87251.4	-49.1		

STATION ALTITUDE 4010.40 FEET MSL  
17 JUNE 81 0700 HRS MDT  
ASCENSION NO. 48

UPPER AIR DATA  
1680220048  
NW 30

GEODLTIC COORDINATES  
32.88497 LAT DEG  
106.49714 LON DEG

TABLE 9

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DEWPOINT CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4010.4	884.9	16.2	4.6	46.0	1061.5	663.9	150.0	3.1	1.000275
4500.0	869.5	15.3	2.8	43.0	1046.7	662.7	163.6	4.6	1.000267
5000.0	854.0	14.7	2.2	43.0	1030.4	662.0	170.5	6.2	1.000262
5500.0	838.7	14.3	1.7	42.4	1013.2	661.6	174.5	7.9	1.000258
6000.0	823.7	14.1	1.3	41.5	995.9	661.3	178.2	8.5	1.000253
6500.0	809.0	13.9	.8	40.7	978.9	661.0	185.0	7.2	1.000248
7000.0	794.5	13.5	.3	40.2	962.6	660.6	193.5	6.3	1.000243
7500.0	780.2	12.5	-.3	41.2	948.8	659.4	202.7	5.8	1.000239
8000.0	766.1	11.4	-.9	42.2	935.1	658.1	206.3	5.3	1.000235
8500.0	752.2	10.4	-1.6	43.2	921.7	656.9	198.0	4.5	1.000231
9000.0	738.7	9.3	-2.2	44.2	908.5	655.6	184.3	3.0	1.000227
9500.0	725.3	8.3	-2.9	45.3	895.5	654.4	126.5	1.5	1.000223
10000.0	712.0	7.9	-3.5	44.3	880.3	653.9	48.5	3.3	1.000219
10500.0	699.0	8.3	-4.2	40.9	863.0	654.4	33.0	6.8	1.000214
11000.0	686.3	8.8	-4.2	39.6	845.9	654.9	32.0	9.9	1.000210
11500.0	673.8	8.6	-4.8	38.3	831.0	654.7	32.6	12.7	1.000206
12000.0	661.4	7.9	-5.9	37.0	818.1	653.8	33.6	12.6	1.000201
12500.0	649.3	7.1	-7.0	35.7	805.4	652.9	35.2	10.9	1.000197
13000.0	637.4	6.4	-8.2	34.4	792.8	652.0	31.5	8.3	1.000193
13500.0	625.7	5.6	-9.3	33.1	780.5	651.1	3.8	5.2	1.000189
14000.0	614.2	5.4	-9.5	33.0	766.7	650.8	23.5	3.2	1.000185
14500.0	602.7	4.2	-10.6	33.0	755.7	649.4	1.7	2.4	1.000182
15000.0	591.5	3.0	-11.6	33.0	744.9	647.9	334.7	3.0	1.000178
15500.0	580.4	1.8	-12.7	33.0	734.2	646.5	328.2	4.7	1.000175
16000.0	569.6	.6	-13.7	33.0	723.7	645.1	326.5	6.2	1.000172
16500.0	558.9	-.5	-14.8	33.0	713.3	643.6	330.2	6.8	1.000169
17000.0	548.5	-1.7	-15.8	33.0	703.1	642.2	330.1	7.3	1.000166
17500.0	538.1	-2.2	-16.2	33.0	691.0	641.7	314.1	7.4	1.000163
18000.0	527.9	-2.4	-16.5	33.0	678.5	641.4	298.7	8.0	1.000160
18500.0	517.9	-3.0	-17.0	33.0	667.1	640.7	281.0	9.1	1.000157
19000.0	508.0	-4.4	-18.2	33.0	657.9	639.0	269.1	9.9	1.000154
19500.0	498.3	-5.8	-19.4	33.0	648.5	637.4	261.0	7.6	1.000151
20000.0	488.6	-6.7	-20.2	33.0	638.1	636.3	257.6	5.6	1.000149
20500.0	479.2	-7.5	-21.0	33.0	627.9	635.2	284.4	3.8	1.000146
21000.0	469.9	-8.4	-21.8	33.0	617.9	634.1	322.8	4.1	1.000143
21500.0	460.8	-9.3	-22.6	33.0	608.0	633.0	335.6	6.8	1.000141
22000.0	451.8	-10.5	-23.5	33.1	598.7	631.7	340.7	8.9	1.000138
22500.0	442.8	-11.0	-24.6	33.5	589.9	630.0	343.1	8.7	1.000136
23000.0	434.1	-13.2	-25.7	33.8	581.2	628.4	345.3	7.9	1.000134
23500.0	425.5	-14.5	-26.8	34.1	572.7	626.7	347.3	5.5	1.000131

GEODETIC COORDINATES  
32.88497 LAT DEG  
106.49714 LON DEG

UPPER AIR DATA  
1680220048  
NW 30

TABLE 9 CON'T

STATION ALTITUDE 4310.40 FEET MSL  
17 JUNE 81 0700 HRS MDT  
ASCENSION NO. 48

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
24000.0	417.0	-15.9	34.4	564.4	625.0	347.5	3.8	1.000129
24500.0	408.7	-17.2	34.7	556.1	623.4	339.0	3.6	1.000127
25000.0	400.6	-18.6	35.0	548.0	621.7	331.8	3.8	1.000125
25500.0	392.4	-19.8	35.0	539.5	620.2	328.5	4.5	1.000123
26000.0	384.4	-21.1	35.0	531.0	618.7	326.6	4.6	1.000121
26500.0	376.5	-22.3	35.0	522.7	617.1	325.3	4.3	1.000119
27000.0	368.8	-23.5	35.0	514.5	615.6	324.8	4.4	1.000117
27500.0	361.2	-24.8	35.0	506.5	614.1	324.8	4.8	1.000115
28000.0	353.8	-26.0	35.0	498.6	612.5	325.7	5.6	1.000113
28500.0	346.5	-27.2	35.0	490.8	611.0	326.4	6.4	1.000111
29000.0	339.2	-28.6	34.9	483.1	609.3	326.3	6.9	1.000109
29500.0	332.0	-30.0	34.7	475.6	607.5	326.2	7.2	1.000107
30000.0	324.9	-31.4	34.6	468.2	605.8	326.1	6.8	1.000105
30500.0	318.0	-32.8	34.4	460.9	604.0	326.0	6.3	1.000104
31000.0	311.2	-34.2	34.3	453.7	602.2	326.1	5.8	1.000102
31500.0	304.6	-35.6	34.1	446.7	600.5	326.0	5.4	1.000100
32000.0	298.1	-37.0	34.0	439.7	598.7	325.8	5.6	1.000099
32500.0	291.6	-38.5	34.0	432.9	596.8	325.6	5.7	1.000097
33000.0	285.2	-40.0	34.0	426.1	594.9	326.6	5.7	1.000095
33500.0	278.9	-41.3	30.7**	419.0	593.2	327.8	5.7	1.000094
34000.0	272.7	-42.5	24.3**	411.8	591.7	332.5	5.1	1.000092
34500.0	266.6	-43.7	18.0**	404.6	590.2	343.3	4.1	1.000090
35000.0	260.6	-44.8	11.7**	397.6	588.7	356.7	3.6	1.000089
35500.0	254.8	-46.0	5.3**	390.8	587.1	1.6	3.4	1.000087
36000.0	249.1	-47.2		384.0	585.6	4.2	2.9	1.000086
36500.0	243.3	-48.3		377.0	584.2	337.0	2.5	1.000084
37000.0	237.8	-49.4		370.1	582.8	294.7	3.5	1.000082
37500.0	232.3	-50.4		363.4	581.4	272.0	6.5	1.000081
38000.0	227.0	-51.5		356.8	580.0	263.9	10.0	1.000079
38500.0	221.8	-52.6		350.3	578.5	258.4	15.2	1.000078
39000.0	216.6	-53.0		342.8	578.0	255.7	20.4	1.000076
39500.0	211.6	-53.0		334.8	578.0	254.2	24.2	1.000075
40000.0	206.7	-53.5		327.8	577.3	253.1	27.6	1.000073
40500.0	201.8	-54.4		321.4	576.2	252.9	29.7	1.000072
41000.0	197.1	-55.1		314.8	575.3	253.0	31.5	1.000070
41500.0	192.4	-55.7		308.2	574.5	254.1	33.5	1.000069
42000.0	187.8	-56.3		301.8	573.7	255.3	35.5	1.000067
42500.0	183.4	-56.9		295.4	572.8	255.7	36.0	1.000066
43000.0	179.0	-57.6		289.2	572.0	255.7	35.4	1.000064
43500.0	174.7	-58.2		283.2	571.2	256.4	34.8	1.000063

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES  
32.88497 LAT DEG  
106.49714 LON DEG

UPPER AIR DATA  
1680220048  
NW 30

STATION ALTITUDE 4010.40 FEET MSL  
17 JUNE 81 0700 HRS MDT  
ASCENSION NO. 48

TABLE 9 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	170.6	-58.8		277.3	570.3	258.0	34.2	1.000062
44500.0	166.5	-59.4		271.5	569.5	260.1	33.9	1.000060
45000.0	162.6	-60.1		265.8	568.7	263.1	34.1	1.000059
45500.0	158.7	-60.7		260.2	567.9	266.0	34.4	1.000058
46000.0	154.9	-61.5		255.0	566.7	266.4	34.1	1.000057
46500.0	151.1	-62.4		249.9	565.5	266.6	33.8	1.000056
47000.0	147.5	-63.2		244.7	564.5	268.1	32.7	1.000054
47500.0	143.8	-63.9		239.5	563.5	270.4	31.1	1.000053
48000.0	140.3	-64.6		234.4	562.6	273.4	29.8	1.000052
48500.0	136.9	-65.3		229.5	561.6	277.7	29.0	1.000051
49000.0	133.5	-66.0		224.6	560.7	282.2	28.3	1.000050
49500.0	130.2	-66.4		219.4	560.1	285.6	27.7	1.000049
50000.0	127.0	-66.8		214.4	559.6	289.0	27.2	1.000048
50500.0	123.8	-67.2		209.5	559.1	291.8	25.7	1.000047
51000.0	120.8	-67.6		204.7	558.5	293.9	23.1	1.000046
51500.0	117.8	-68.1		200.1	557.9	296.6	20.4	1.000045
52000.0	114.8	-68.6		195.6	557.2	298.4	18.0	1.000044
52500.0	112.0	-69.2		191.2	556.4	301.7	15.6	1.000043
53000.0	109.2	-69.7		186.9	555.6	304.9	13.7	1.000042
53500.0	106.4	-70.0		182.4	555.3	307.9	12.4	1.000041
54000.0	103.7	-70.1		178.0	555.1	312.9	11.2	1.000040
54500.0	101.1	-70.3		173.7	554.8	317.9	10.7	1.000039
55000.0	98.6	-70.8		169.7	554.2	323.3	10.2	1.000038
55500.0	96.1	-71.5		166.0	553.2	328.9	9.3	1.000037
56000.0	93.6	-72.2		162.4	552.2	336.5	7.4	1.000036
56500.0	91.3	-72.2		158.3	552.2	348.7	5.7	1.000035
57000.0	89.0	-71.8		153.9	552.8	348.7	3.3	1.000034
57500.0	86.8	-71.3		149.7	553.5	348.7	1.5	1.000033
58000.0	84.6	-70.9		145.7	554.1	348.7	3.3	1.000032
58500.0	82.4	-70.4		141.7	554.7	348.7	4.4	1.000032
59000.0	80.4	-70.0		137.8	555.3	348.7	5.6	1.000031
59500.0	78.4	-69.6		134.1	555.9	348.7	6.4	1.000030
60000.0	76.4	-69.1		130.4	556.5	348.7	6.3	1.000029
60500.0	74.5	-68.7		126.9	557.1	348.7	6.3	1.000028
61000.0	72.6	-68.2		123.4	557.7	348.7	6.3	1.000027
61500.0	70.8	-67.8		120.0	558.3	348.7	6.5	1.000027
62000.0	69.0	-67.0		116.6	559.4	348.7	6.6	1.000026
62500.0	67.3	-65.9		113.1	560.9	348.7	6.5	1.000025
63000.0	65.7	-64.7		109.8	562.4	348.7	6.4	1.000024
63500.0	64.0	-63.6		106.5	563.9	348.7	6.3	1.000024



STATION ALTITUDE 4010.40 FEET MSL  
17 JUNE 81 0700 HRS MDT  
ASCENSION NO. 48

UPPER AIR DATA  
1680220048  
NW 30  
TABLE 9 CONT

GEODETIC COORDINATES  
32.88497 LAT DEG  
106.49714 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	62.5	-62.8		103.5	565.0	139.9	5.9	1.000023
64500.0	61.0	-62.5		100.8	565.5	137.1	5.6	1.000022
65000.0	59.5	-62.2		98.3	565.9	122.2	6.6	1.000022
65500.0	58.1	-61.8		95.7	566.3	107.9	9.2	1.000021
66000.0	56.7	-61.5		93.3	566.7	100.2	12.1	1.000021
66500.0	55.3	-61.2		90.9	567.2	96.6	13.6	1.000020
67000.0	54.0	-60.9		88.6	567.6	94.0	15.0	1.000020
67500.0	52.7	-60.6		86.3	568.0	91.7	16.0	1.000019
68000.0	51.4	-60.3		84.1	568.4	89.4	16.1	1.000019
68500.0	50.2	-59.9		81.9	568.9	87.2	16.2	1.000018
69000.0	49.0	-59.3		79.8	569.7	86.3	17.8	1.000018
69500.0	47.8	-58.7		77.7	570.5	85.9	19.5	1.000017
70000.0	46.7	-58.1		75.6	571.4	86.5	20.9	1.000017
70500.0	45.6	-57.5		73.6	572.2	89.6	21.6	1.000016
71000.0	44.5	-56.8		71.7	573.0	92.5	22.3	1.000016
71500.0	43.5	-56.2		69.8	573.8	93.3	21.5	1.000016
72000.0	42.4	-55.6		68.0	574.6	93.2	20.0	1.000015
72500.0	41.4	-55.0		66.2	575.4	93.0	18.4	1.000015
73000.0	40.5	-54.4		64.4	576.2	90.4	17.5	1.000014
73500.0	39.5	-53.9		62.8	576.8	86.8	16.8	1.000014
74000.0	38.6	-53.7		61.3	577.1	82.9	16.2	1.000014
74500.0	37.7	-53.5		59.8	577.4	82.7	16.5	1.000013
75000.0	36.8	-53.3		58.3	577.7	83.4	17.0	1.000013
75500.0	36.0	-53.0		56.9	578.0	84.1	17.6	1.000013
76000.0	35.1	-52.8		55.6	578.3	84.8	18.1	1.000012
76500.0	34.3	-52.6		54.2	578.6	85.5	18.7	1.000012
77000.0	33.5	-52.4		52.9	578.9	86.1	19.3	1.000012
77500.0	32.8	-52.1		51.6	579.2	80.8	19.9	1.000011
78000.0	32.0	-51.9		50.4	579.5	74.7	20.8	1.000011
78500.0	31.3	-51.7		49.2	579.7	69.4	21.9	1.000011
79000.0	30.5	-51.5		48.0	580.0	69.1	23.4	1.000011
79500.0	29.8	-51.4		46.9	580.1	68.9	24.8	1.000010
80000.0	29.1	-51.9		45.9	579.5	70.3	25.7	1.000010
80500.0	28.5	-52.3		44.9	578.9	77.1	25.3	1.000010
81000.0	27.8	-52.8		44.0	578.3	84.2	25.2	1.000010
81500.0	27.2	-53.0		43.0	578.1	88.9	25.4	1.000010
82000.0	26.5	-52.6		41.9	578.5	90.8	25.5	1.000009
82500.0	25.9	-52.3		40.9	578.9	92.7	25.6	1.000009
83000.0	25.3	-52.0		39.9	579.4	92.0	26.2	1.000009
83500.0	24.8	-51.6		38.9	579.8	89.9	27.0	1.000009

STATION ALTITUDE 4010.40 FEET MSL  
17 JUNE 81 07:00 HRS MDT  
ASCENSION NO. 48

UPPER AIR DATA  
1680220048  
NW 30

GEODETIC COORDINATES  
32.88497 LAT DEG  
106.49714 LON DEG

TABLE 9 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE					DIRECTION DEGREES(TN)	SPEED KNOTS	
84000.0	24.2	-51.3			38.0	580.3		87.8	27.8	1.000008
84500.0	23.6	-51.0			37.1	580.7				1.000008
85000.0	23.1	-50.6			36.2	581.2				1.000008
85500.0	22.6	-50.3			35.3	581.6				1.000008
86000.0	22.0	-49.9			34.4	582.0				1.000008
86500.0	21.5	-49.6			33.6	582.5				1.000007
87000.0	21.0	-49.3			32.7	582.9				1.000007

STATION ALTITUDE 4010.40 FEET MSL  
 17 JUNE 81  
 ASCENSION NO. 48

MANDATORY LEVELS  
 1680220048  
 NW 30

GEOGETIC COORDINATES  
 32.88497 LAT DEG  
 106.49714 LON DEG

TABLE 10

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5127.	14.5	2.1	43.	171.8	6.7
800.0	6805.	13.7	.5	40.	190.4	6.5
750.0	8579.	10.2	-1.7	43.	196.3	4.4
700.0	10452.	8.3	-4.2	41.	33.7	6.5
650.0	12462.	7.2	-7.0	36.	35.1	11.0
600.0	14611.	3.9	-10.8	33.	353.0	2.4
550.0	16908.	-1.6	-15.7	33.	332.6	7.3
500.0	19385.	-5.6	-19.3	33.	262.9	8.1
450.0	22071.	-10.7	-23.7	33.	341.1	8.9
400.0	24998.	-18.7	-30.3	35.	331.6	3.8
350.0	28214.	-26.7	-37.4	35.	326.1	6.0
300.0	31793.	-36.6	-46.7	34.	325.9	5.5
250.0	35841.	-47.0			8.4	3.1
200.0	40595.	-54.7			253.0	30.4
175.0	43376.	-58.2			256.3	34.8
150.0	46530.	-62.7			266.7	33.7
125.0	50174.	-67.1			291.0	26.9
100.0	54552.	-70.4			319.9	10.5
80.0	58880.	-69.9			141.5	5.7
70.0	61503.	-67.6			132.9	6.5
60.0	64595.	-62.3			131.6	5.7
50.0	68311.	-59.8			87.0	16.2
40.0	72947.	-54.1			89.0	17.2
30.0	79042.	-51.3			68.9	24.3
25.0	82911.	-51.8			91.0	26.5

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3912.75 FEET MSL  
17 JUNE 81  
ASCENSION NO. 104

SIGNIFICANT LEVEL DATA  
1680290104  
E-28

GEODETIC COORDINATES  
32.89927 LAT DEG  
106.40591 LON DEG

TABLE 11

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR	DEWPOINT DEGREES CENTIGRADE	
894.5	15.0	3.5	46.0
880.8	15.7	1.1	37.0
865.0	14.9	.7	38.0
850.0	15.0	.4	37.0
806.4	14.9	-3.0	29.0
721.6	8.0	-5.1	39.0
700.0	9.0	-6.4	33.0
685.0	9.7	-7.4	29.0
622.2	5.5	-16.3	19.0
596.4	3.9	-17.0	20.0
559.0	-7	-20.3	21.0
537.4	-9	-21.6	19.0
502.5	-4.8	-23.7	21.0
473.4	-7.4	-26.4	20.0
400.0	-18.8	-35.1	22.0
300.0	-37.5	-50.1	25.0
278.8	-41.8		
250.0	-47.4		
244.2	-48.7		
227.8	-51.3		
215.8	-51.0		
200.0	-54.0		
172.4	-57.9		
150.0	-62.4		
123.6	-65.6		
100.0	-70.0		
95.4	-71.0		
87.6	-68.6		
80.6	-66.7		
76.2	-68.7		
70.0	-64.4		
58.2	-60.7		
50.0	-57.4		
39.6	-52.2		
37.2	-52.4		
30.0	-50.4		
20.8	-44.7		

STATION ALTITUDE 3912.75 FEET MSL  
17 JUNE 81 0800 HRS MDT  
ASCENSION NO. 104

UPPER AIR DATA  
1680290104  
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GEODETIC COORDINATES  
32.89927 LAT DEG  
106.40591 LON DEG

TABLE 12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3912.7	894.5	15.0	3.5	46.0	1077.8	662.4	.0	.0	1.000276
4000.0	891.7	15.1	3.0	44.2	1074.0	662.5	173.0	.5	1.000274
4500.0	875.8	15.4	1.0	37.3	1054.2	662.8	173.0	3.4	1.000265
5000.0	860.2	14.9	.6	37.7	1037.3	662.2	173.0	6.2	1.000260
5500.0	844.9	15.0	.1	36.1	1018.7	662.2	173.0	9.1	1.000255
6000.0	829.8	15.0	-1.0	33.3	1000.8	662.1	178.7	9.8	1.000249
6500.0	815.0	14.9	-2.2	30.6	983.2	662.0	188.8	9.5	1.000243
7000.0	800.4	14.4	-3.0	29.7	967.3	661.4	197.5	8.4	1.000238
7500.0	785.0	13.3	-3.3	31.3	953.6	660.1	205.5	7.6	1.000235
8000.0	771.8	12.2	-3.6	33.0	940.1	658.8	206.5	7.5	1.000231
8500.0	757.8	11.0	-4.0	34.6	926.8	657.5	200.9	7.6	1.000228
9000.0	744.2	9.9	-4.4	36.2	913.8	656.2	191.2	8.0	1.000225
9500.0	730.7	8.8	-4.8	37.9	900.9	654.9	178.6	4.9	1.000221
10000.0	717.5	8.2	-5.3	37.9	886.5	654.2	118.6	2.2	1.000217
10500.0	704.4	8.8	-6.1	34.2	868.5	654.8	40.1	6.0	1.000212
11000.0	691.6	9.4	-7.0	30.8	851.0	655.5	36.1	10.2	1.000207
11500.0	679.0	9.3	-8.2	28.1	835.8	655.4	40.3	12.9	1.000202
12000.0	665.5	8.5	-9.8	26.2	823.0	654.4	44.8	12.7	1.000197
12500.0	654.3	7.7	-11.4	24.2	810.4	653.4	50.2	11.7	1.000193
13000.0	642.4	6.9	-13.1	22.3	798.0	652.4	40.4	8.4	1.000188
13500.0	630.6	6.1	-14.9	20.4	785.8	651.4	30.0	5.6	1.000184
14000.0	619.0	5.3	-16.3	19.1	773.6	650.4	3.5	4.5	1.000181
14500.0	607.6	4.6	-16.6	19.6	761.2	649.6	345.0	4.9	1.000178
15000.0	595.3	3.9	-17.0	20.0	749.1	648.8	332.1	6.0	1.000175
15500.0	583.2	2.6	-17.9	20.3	738.7	647.2	327.3	7.0	1.000172
16000.0	574.2	1.2	-18.9	20.6	728.5	645.6	326.0	8.0	1.000169
16500.0	563.5	-.1	-19.8	20.9	718.4	644.0	330.0	8.8	1.000166
17000.0	552.9	-.8	-20.6	20.4	706.5	643.2	322.8	9.1	1.000163
17500.0	542.5	-.9	-21.2	19.5	693.5	643.1	308.5	9.4	1.000160
18000.0	532.2	-1.5	-21.9	19.3	681.9	642.4	290.0	9.4	1.000157
18500.0	522.1	-2.6	-22.5	19.9	671.7	641.0	273.0	9.8	1.000155
19000.0	512.1	-3.7	-23.1	20.4	661.7	639.7	260.4	8.5	1.000152
19500.0	502.4	-4.8	-23.7	21.0	651.8	638.4	253.8	7.1	1.000150
20000.0	492.7	-5.7	-24.6	20.7	641.3	637.4	264.8	5.3	1.000147
20500.0	483.3	-6.5	-25.5	20.3	631.0	636.3	301.9	4.6	1.000145
21000.0	474.0	-7.3	-26.4	20.0	620.8	635.3	335.3	6.7	1.000142
21500.0	464.6	-8.7	-27.4	20.2	611.7	633.7	340.0	8.0	1.000140
22000.0	455.4	-10.0	-28.4	20.5	602.7	632.1	341.9	8.9	1.000137
22500.0	446.5	-11.4	-29.4	20.7	593.8	630.5	339.8	8.1	1.000135
23000.0	437.6	-12.7	-30.4	20.9	585.2	628.8	338.9	7.0	1.000133

STATION ALTITUDE 3912.75 FEET MSL  
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GEODETIC COORDINATES  
32.89927 LAT DEG  
106.40591 LON DEG

TABLE 12 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	429.0	-14.1	-31.5	576.6	627.2	340.5	5.4	1.000131
24000.0	420.5	-15.4	-32.5	568.2	625.5	339.6	4.2	1.000129
24500.0	412.2	-16.8	-33.5	559.9	623.9	333.7	3.5	1.000127
25000.0	404.1	-18.1	-34.6	551.8	622.2	325.8	3.1	1.000125
25500.0	395.9	-19.5	-35.7	543.5	620.6	318.7	3.3	1.000123
26000.0	387.6	-20.9	-36.7	535.0	618.9	315.9	3.5	1.000121
26500.0	379.5	-22.2	-37.8	526.7	617.2	316.2	3.6	1.000119
27000.0	371.5	-23.6	-38.9	518.5	615.5	327.7	3.8	1.000117
27500.0	363.7	-25.0	-40.0	510.5	613.8	338.7	4.2	1.000115
28000.0	356.1	-26.4	-41.1	502.6	612.1	343.0	5.2	1.000113
28500.0	348.7	-27.7	-42.2	494.8	610.4	341.5	5.8	1.000111
29000.0	341.4	-29.1	-43.3	487.2	608.6	331.4	6.0	1.000109
29500.0	334.2	-30.5	-44.4	479.7	606.9	323.2	6.2	1.000108
30000.0	327.2	-31.9	-45.5	472.3	605.2	316.7	6.4	1.000106
30500.0	320.3	-33.2	-46.7	465.1	603.5	314.9	6.4	1.000104
31000.0	313.6	-34.6	-47.8	458.0	601.7	315.4	6.2	1.000103
31500.0	307.1	-36.0	-48.9	451.0	600.0	316.9	6.1	1.000101
32000.0	300.6	-37.4	-50.0	444.1	598.2	317.5	6.0	1.000099
32500.0	294.1	-38.7	-53.8	436.9	596.6	318.8	5.6	1.000098
33000.0	287.6	-40.0	-59.2	429.7	594.9	31.8	5.3	1.000096
33500.0	281.3	-41.3	-69.3	422.6	593.2	31.4	4.6	1.000094
34000.0	275.0	-42.5		415.4	591.7	310.3	4.1	1.000093
34500.0	268.9	-43.7		408.2	590.2	307.4	4.3	1.000091
35000.0	262.8	-44.8		401.0	588.7	308.0	4.2	1.000089
35500.0	257.0	-46.0		394.1	587.2	316.1	3.8	1.000088
36000.0	251.2	-47.2		387.2	585.7	311.5	3.5	1.000086
36500.0	245.5	-48.4		380.5	584.0	287.9	3.7	1.000085
37000.0	239.9	-49.4		373.4	582.8	272.0	6.3	1.000083
37500.0	234.4	-50.2		366.3	581.7	267.6	10.9	1.000082
38000.0	229.0	-51.1		359.3	580.5	263.7	15.1	1.000080
38500.0	223.7	-51.2		351.1	580.4	259.7	19.2	1.000078
39000.0	218.5	-51.1		342.8	580.6	257.2	22.9	1.000076
39500.0	213.5	-51.4		335.4	580.1	255.6	25.8	1.000075
40000.0	208.5	-52.4		329.0	578.9	254.8	28.4	1.000073
40500.0	203.7	-53.3		322.7	577.7	256.4	30.2	1.000072
41000.0	199.0	-54.1		316.5	576.5	257.5	31.9	1.000070
41500.0	194.3	-54.8		309.9	575.7	256.4	33.0	1.000069
42000.0	189.7	-55.4		303.5	574.9	255.5	34.0	1.000068
42500.0	185.2	-56.0		297.2	574.1	255.3	34.9	1.000066
43000.0	180.9	-56.6		291.0	573.2	255.1	35.8	1.000065

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3912.75 FEET MSL  
17 JUNE 81 0800 HRS MDT  
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UPPER AIR DATA  
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GEODETTIC COORDINATES  
32.89927 LAT DEG  
106.40591 LON DEG

TABLE 12 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
43500.0	170.6	-57.3		285.0	572.4	257.2	35.6	1.000063
44000.0	172.4	-57.9		279.1	571.6	259.4	35.4	1.000062
44500.0	168.3	-58.7		273.4	570.5	261.8	34.9	1.000061
45000.0	164.2	-59.5		267.8	569.5	264.4	34.3	1.000060
45500.0	160.3	-60.3		262.3	568.4	266.5	34.3	1.000058
46000.0	156.5	-61.0		257.0	567.4	268.3	34.4	1.000057
46500.0	152.7	-61.8		251.7	566.3	270.7	33.8	1.000056
47000.0	149.0	-62.5		246.4	565.4	273.7	32.2	1.000055
47500.0	145.4	-62.9		240.9	564.9	277.2	30.9	1.000054
48000.0	141.8	-63.3		235.5	564.3	281.2	30.0	1.000052
48500.0	138.3	-63.7		230.1	563.8	285.3	29.2	1.000051
49000.0	135.0	-64.1		225.0	563.2	287.8	28.3	1.000050
49500.0	131.7	-64.6		219.9	562.7	290.6	27.4	1.000049
50000.0	128.4	-65.0		214.9	562.1	291.6	25.0	1.000048
50500.0	125.3	-65.4		210.1	561.6	292.3	22.2	1.000047
51000.0	122.2	-65.8		205.4	560.9	292.8	19.7	1.000046
51500.0	119.2	-66.4		200.8	560.2	292.6	17.6	1.000045
52000.0	116.2	-66.9		196.3	559.5	292.9	15.7	1.000044
52500.0	113.3	-67.4		191.9	558.8	296.0	14.5	1.000043
53000.0	110.5	-67.9		187.6	558.1	299.6	13.3	1.000042
53500.0	107.8	-68.4		183.4	557.4	307.1	12.1	1.000041
54000.0	105.1	-69.0		179.3	556.7	316.6	11.2	1.000040
54500.0	102.5	-69.5		175.3	556.0	325.6	10.1	1.000039
55000.0	99.9	-70.0		171.3	555.2	335.1	8.8	1.000038
55500.0	97.4	-70.6		167.5	554.5	345.9	7.7	1.000037
56000.0	94.9	-70.9		163.5	554.1	354.4	5.9	1.000036
56500.0	92.6	-70.1		158.8	555.1	9.4	4.4	1.000035
57000.0	90.2	-69.4		154.3	556.0	34.0	2.7	1.000034
57500.0	88.0	-68.7		149.9	557.0	86.8	2.3	1.000033
58000.0	85.8	-68.1		145.7	557.8	124.5	3.4	1.000032
58500.0	83.6	-67.5		141.7	558.6	143.5	4.7	1.000032
59000.0	81.6	-67.0		137.8	559.4	153.7	6.3	1.000031
59500.0	79.5	-67.2		134.5	559.1	155.8	7.2	1.000030
60000.0	77.6	-68.1		131.7	557.9	153.3	7.2	1.000029
60500.0	75.6	-68.3		128.6	557.6	150.8	7.2	1.000029
61000.0	73.8	-67.1		124.7	559.3	141.6	7.3	1.000028
61500.0	71.9	-65.8		120.9	561.0	131.4	7.7	1.000027
62000.0	70.2	-64.5		117.2	562.7	125.0	8.0	1.000026
62500.0	68.5	-64.0		114.0	563.5	124.5	7.6	1.000025
63000.0	66.8	-63.5		111.0	564.1	124.0	7.3	1.000025

STATION ALTITUDE 3912.75 FEET MSL  
17 JUNE 81 0800 HRS MGT  
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UPPER AIR DATA  
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GEODETIC COORDINATES  
32.89927 LAT DEG  
106.40591 LON DEG

TABLE 12 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
63500.0	65.2	-63.0		108.0	564.8	122.3	7.0	1.000024
64000.0	63.6	-62.5		105.2	565.5	120.1	6.8	1.000023
64500.0	62.1	-62.0		102.4	566.1	116.1	7.1	1.000023
65000.0	60.6	-61.5		99.7	566.8	109.0	9.3	1.000022
65500.0	59.1	-61.0		97.0	567.4	104.8	11.6	1.000022
66000.0	57.7	-60.5		94.5	568.1	103.5	12.5	1.000021
66500.0	56.3	-60.0		92.0	568.8	103.1	12.6	1.000020
67000.0	54.9	-59.4		89.6	569.5	102.6	12.8	1.000020
67500.0	53.6	-58.9		87.2	570.2	98.2	14.5	1.000019
68000.0	52.4	-58.4		84.9	570.9	94.7	16.3	1.000019
68500.0	51.1	-57.9		82.7	571.6	93.2	18.4	1.000018
69000.0	49.9	-57.4		80.5	572.3	93.3	20.8	1.000018
69500.0	48.7	-56.8		78.5	573.0	93.5	23.2	1.000017
70000.0	47.6	-56.3		76.4	573.7	93.3	23.1	1.000017
70500.0	46.5	-55.8		74.5	574.4	93.0	21.7	1.000017
71000.0	45.4	-55.2		72.6	575.1	92.6	20.3	1.000016
71500.0	44.3	-54.7		70.7	575.8	89.2	20.4	1.000016
72000.0	43.3	-54.2		68.9	576.5	85.4	20.7	1.000015
72500.0	42.3	-53.7		67.1	577.2	81.8	21.0	1.000015
73000.0	41.3	-53.1		65.4	577.9	80.1	20.5	1.000015
73500.0	40.3	-52.6		63.7	578.6	78.2	20.0	1.000014
74000.0	39.4	-52.2		62.1	579.1	76.9	19.4	1.000014
74500.0	38.5	-52.3		60.7	579.0	77.2	18.7	1.000014
75000.0	37.6	-52.4		59.3	578.9	77.7	18.0	1.000013
75500.0	36.7	-52.3		57.9	579.0	78.8	18.0	1.000013
76000.0	35.9	-52.1		56.5	579.3	81.3	19.5	1.000013
76500.0	35.0	-51.8		55.2	579.5	83.4	20.9	1.000012
77000.0	34.2	-51.6		53.8	579.8	84.5	21.7	1.000012
77500.0	33.5	-51.4		52.6	580.1	84.3	21.4	1.000012
78000.0	32.7	-51.2		51.3	580.4	84.2	21.1	1.000011
78500.0	31.9	-51.0		50.1	580.7	86.5	22.9	1.000011
79000.0	31.2	-50.8		48.9	581.0	90.4	27.2	1.000011
79500.0	30.5	-50.5		47.7	581.2	93.3	31.6	1.000011
80000.0	29.8	-50.3		46.6	581.6	94.3	33.0	1.000010
80500.0	29.1	-49.9		45.4	582.1	94.2	32.0	1.000010
81000.0	28.4	-49.6		44.3	582.5	94.2	30.9	1.000010
81500.0	27.8	-49.2		43.3	583.0	91.3	27.1	1.000010
82000.0	27.2	-48.9		42.2	583.4	84.5	21.5	1.000009
82500.0	26.6	-48.5		41.2	583.9	73.1	16.4	1.000009
83000.0	26.0	-48.2		40.2	584.4	73.1	18.1	1.000009



STATION ALTITUDE 3912.75 FEET MSL			UPPER AIR DATA			GEODETIC COORDINATES			
17 JUNE 81			1680290104			32.89927 LAT DEG			
ASCENSION NO. 104			E-28			106.40591 LON DEG			
TABLE 12 CON'T									
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
83500.0	25.4	-47.8			39.2	584.8	76.3	21.6	1.000009
84000.0	24.8	-47.4			38.3	585.3	78.7	25.1	1.000009
84500.0	24.2	-47.1			37.4	585.8	85.7	28.6	1.000008
85000.0	23.7	-46.7			36.5	586.2	91.1	32.5	1.000008
85500.0	23.2	-46.4			35.6	586.7			1.000008
86000.0	22.6	-46.0			34.7	587.1			1.000008
86500.0	22.1	-45.7			33.9	587.6			1.000008
87000.0	21.6	-45.3			33.1	588.1			1.000007
87500.0	21.1	-44.9			32.3	588.5			1.000007

STATION ALTITUDE 3912.75 FEET MSL  
17 JUNE 81 0800 HRS MDT  
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MANDATORY LEVELS  
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TABLE 13

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5328.	15.0	.4	37.	173.0	8.1
800.0	7011.	14.4	-3.1	30.	197.7	8.3
750.0	8786.	10.4	-4.2	36.	195.2	7.8
700.0	10660.	9.0	-6.4	33.	35.0	7.9
650.0	12671.	7.4	-12.0	24.	49.1	10.5
600.0	14819.	4.1	-16.9	20.	335.9	5.6
550.0	17116.	-8	-20.8	20.	319.0	9.1
500.0	19597.	-5.0	-23.9	21.	255.8	6.7
450.0	22287.	-10.8	-29.0	21.	340.6	8.4
400.0	25212.	-18.8	-35.1	22.	322.2	3.2
350.0	28421.	-27.5	-42.0	23.	342.4	5.8
300.0	31987.	-37.5	-50.1	25.	318.8	6.0
250.0	36026.	-47.4			307.2	3.5
200.0	40791.	-54.0			257.4	31.6
175.0	43581.	-57.5			258.0	35.5
150.0	46740.	-62.4			272.7	32.7
125.0	50406.	-65.4			292.4	22.0
100.0	54812.	-70.0			334.2	6.9
80.0	59189.	-67.0			156.0	7.2
70.0	61834.	-64.4			125.0	8.0
60.0	64949.	-61.3			107.5	10.0
50.0	68695.	-57.4			93.3	20.4
40.0	73375.	-52.4			77.7	19.8
30.0	79499.	-50.4			94.3	33.4
25.0	83426.	-47.6			77.6	23.4

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TABLE 14

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
893.8	3912.7	19.6	1.6	30.0
880.2	4344.2	17.6	.7	32.0
860.4	4981.3	16.8	-.4	31.0
850.0	5321.8	17.8	-6.1	19.0
802.0	6945.8	15.6	-3.8	26.0
744.4	9005.2	11.2	-4.1	34.0
700.0	10688.9	10.4	-9.8	23.0
625.2	13751.6	5.7	-17.4	17.0
616.0	14150.0	5.9	-17.2	17.0
564.4	16477.3	-1	-21.5	18.0
531.2	18070.2	-.9	-22.8	17.0
500.0	19647.6	-4.6	-25.2	18.0
452.2	22223.9	-9.7	-28.9	19.0
400.0	25289.3	-18.1	-35.0	21.0
372.2	27046.0	-22.3	-38.6	21.0
300.0	32116.8	-36.3	-50.2	22.0
250.0	36196.1	-46.1		
230.8	37932.4	-49.8		
220.2	38946.0	-49.7		
200.0	41006.1	-52.9		
172.4	44130.6	-57.5		
150.0	47001.3	-61.6		
132.0	49600.4	-63.7		
128.2	50192.7	-62.8		
100.0	55163.0	-69.4		
86.4	58043.5	-69.2		
81.8	59117.6	-71.0		
70.0	62211.1	-64.6		
65.6	63521.6	-64.3		
50.0	69114.1	-56.3		
40.6	73539.1	-51.0		
30.0	80044.8	-51.3		
25.0	84007.5	-46.4		
20.0	88955.9	-42.4		
17.8	91572.7	-40.8		

STATION ALTITUDE 3912.75 FEET MSL  
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TABLE 15

GEODETTIC COORDINATES  
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GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
3912.7	893.8	19.6	1.6	30.0	1060.5	667.5	.0	.0	1.000267
4000.0	891.0	19.2	1.4	30.4	1058.7	667.1	194.1	.3	1.000266
4500.0	875.3	17.4	.5	31.8	1046.6	665.0	194.1	1.7	1.000262
5000.0	859.8	16.9	-.6	30.3	1030.2	664.3	194.1	3.2	1.000256
5500.0	844.6	17.6	-.5	19.8	1010.3	664.8	194.1	4.6	1.000243
6000.0	829.6	16.9	-5.0	21.9	994.6	664.1	198.6	5.1	1.000241
6500.0	814.9	16.2	-4.3	24.1	979.1	663.4	213.0	4.3	1.000238
7000.0	800.4	15.5	-3.8	26.2	964.0	662.6	216.7	4.2	1.000236
7500.0	786.1	14.4	-3.8	28.2	950.2	661.4	204.7	4.8	1.000233
8000.0	772.0	13.3	-3.8	30.1	936.6	660.2	193.7	4.8	1.000230
8500.0	758.1	12.3	-3.9	32.0	923.2	658.9	178.5	4.3	1.000227
9000.0	744.5	11.2	-4.1	34.0	910.0	657.7	151.7	3.6	1.000224
9500.0	731.1	11.0	-5.6	30.8	894.5	657.3	108.8	4.1	1.000218
10000.0	717.8	10.7	-7.2	27.5	879.3	657.0	84.2	5.7	1.000213
10500.0	704.8	10.5	-9.1	24.2	864.3	656.7	71.0	7.5	1.000207
11000.0	692.0	9.9	-10.5	22.4	850.4	655.9	60.4	8.9	1.000202
11500.0	679.4	9.2	-11.8	21.4	837.2	655.0	47.5	9.6	1.000198
12000.0	660.9	8.4	-13.0	20.4	824.2	654.1	36.6	9.9	1.000194
12500.0	654.7	7.6	-14.2	19.5	811.4	653.2	24.9	9.2	1.000191
13000.0	642.8	6.9	-15.5	18.5	798.9	652.2	12.5	8.6	1.000187
13500.0	631.0	6.1	-16.7	17.5	786.5	651.3	35.6	7.8	1.000183
14000.0	619.4	5.8	-17.3	17.0	772.8	651.0	345.7	7.3	1.000180
14500.0	607.9	5.0	-17.9	17.2	760.7	650.0	334.9	7.0	1.000177
15000.0	596.6	3.7	-18.8	17.4	750.1	648.5	325.5	6.9	1.000174
15500.0	585.5	2.4	-19.7	17.6	739.6	647.0	322.8	6.7	1.000171
16000.0	574.6	1.1	-20.6	17.8	729.3	645.4	320.2	6.5	1.000168
16500.0	563.9	-.1	-21.5	18.0	719.0	644.0	318.3	6.3	1.000166
17000.0	553.3	-.4	-21.9	17.7	706.1	643.7	314.2	6.1	1.000163
17500.0	542.9	-.6	-22.4	17.4	693.4	643.4	294.8	6.7	1.000160
18000.0	532.6	-.9	-22.8	17.0	681.0	643.1	280.2	8.0	1.000157
18500.0	522.5	-1.9	-23.5	17.3	670.6	641.8	268.4	9.2	1.000154
19000.0	512.6	-3.1	-24.2	17.6	660.8	640.4	259.5	10.7	1.000152
19500.0	502.8	-4.3	-25.0	17.9	651.1	639.0	256.2	10.6	1.000149
20000.0	493.2	-5.3	-25.7	18.1	641.1	637.8	255.0	9.6	1.000147
20500.0	483.7	-6.3	-26.5	18.3	631.0	636.6	262.4	8.3	1.000144
21000.0	474.3	-7.3	-27.2	18.5	621.2	635.4	281.8	7.2	1.000142
21500.0	465.1	-8.3	-27.9	18.7	611.4	634.2	300.2	7.1	1.000140
22000.0	450.2	-9.3	-28.6	18.9	601.9	633.0	312.8	7.6	1.000137
22500.0	447.2	-10.5	-29.5	19.2	592.8	631.6	320.8	7.9	1.000135
23000.0	438.4	-11.8	-30.4	19.5	584.1	629.9	321.6	7.3	1.000133

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TABLE 15 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
23500.0	429.7	-13.2	-31.4	19.8	575.6	628.2	321.2	6.7	1.000131
24000.0	421.2	-14.6	-32.4	20.2	567.2	626.6	313.1	5.6	1.000129
24500.0	412.8	-15.9	-33.4	20.5	559.0	624.9	301.5	4.7	1.000127
25000.0	404.7	-17.3	-34.4	20.8	550.8	623.2	281.5	4.1	1.000125
25500.0	396.6	-18.6	-35.4	21.0	542.6	621.6	258.6	4.1	1.000123
26000.0	388.5	-19.8	-36.4	21.0	534.1	620.2	256.1	4.1	1.000121
26500.0	380.6	-21.0	-37.5	21.0	525.7	618.7	258.7	4.0	1.000119
27000.0	372.9	-22.2	-38.5	21.0	517.5	617.2	272.3	3.7	1.000117
27500.0	365.1	-23.6	-39.6	21.1	509.4	615.5	296.1	3.9	1.000115
28000.0	357.4	-24.9	-40.7	21.2	501.5	613.8	310.9	4.8	1.000113
28500.0	349.9	-26.3	-41.9	21.3	493.7	612.1	313.4	6.2	1.000111
29000.0	342.5	-27.7	-43.0	21.4	486.1	610.4	314.5	7.4	1.000109
29500.0	335.3	-29.1	-44.2	21.5	478.5	608.7	312.7	7.5	1.000107
30000.0	328.3	-30.5	-45.3	21.6	471.1	606.9	311.0	7.6	1.000106
30500.0	321.4	-31.8	-46.5	21.7	463.9	605.2	312.5	7.1	1.000104
31000.0	314.6	-33.2	-47.6	21.8	456.7	603.5	314.3	6.6	1.000102
31500.0	308.0	-34.6	-48.8	21.9	449.7	601.7	315.2	6.6	1.000101
32000.0	301.5	-36.0	-49.9	22.0	442.8	600.0	315.8	6.7	1.000099
32500.0	294.9	-37.2	-51.8	19.9**	435.4	598.4	316.0	6.9	1.000097
33000.0	288.4	-38.4	-54.1	17.2**	428.0	596.9	315.9	7.1	1.000096
33500.0	282.0	-39.6	-56.4	14.5**	420.7	595.3	316.1	7.0	1.000094
34000.0	275.8	-40.8	-59.1	11.8**	413.5	593.8	316.9	6.4	1.000092
34500.0	269.7	-42.0	-62.0	9.1**	406.5	592.3	317.9	5.8	1.000091
35000.0	263.7	-43.2	-65.5	6.5**	399.6	590.7	319.8	5.3	1.000089
35500.0	257.9	-44.4	-70.2	3.8**	392.8	589.2	322.1	4.8	1.000088
36000.0	252.2	-45.6	-79.3	1.1**	386.2	587.6	315.2	5.2	1.000086
36500.0	246.5	-46.7			379.3	586.2	308.0	6.0	1.000084
37000.0	240.9	-47.8			372.5	584.8	295.0	7.7	1.000083
37500.0	235.4	-48.9			365.7	583.4	282.6	10.7	1.000081
38000.0	230.1	-49.8			358.8	582.2	275.4	14.0	1.000080
38500.0	224.8	-49.7			350.5	582.3	268.1	18.5	1.000078
39000.0	219.6	-49.8			342.6	582.2	263.8	23.1	1.000076
39500.0	214.6	-50.6			335.8	581.2	260.6	26.5	1.000075
40000.0	209.6	-51.3			329.2	580.2	258.0	28.9	1.000073
40500.0	204.8	-52.1			322.7	579.2	255.9	31.4	1.000072
41000.0	200.1	-52.9			316.4	578.2	256.4	32.3	1.000070
41500.0	195.4	-53.6			310.0	577.2	256.8	33.2	1.000069
42000.0	190.8	-54.4			303.8	576.2	256.6	34.6	1.000068
42500.0	186.3	-55.1			297.6	575.3	256.0	36.4	1.000066
43000.0	181.9	-55.8			291.6	574.3	255.5	38.1	1.000065

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

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TABLE 15 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
43500.0	177.6	-56.6		285.7	573.3	254.6	38.1	1.000064
44000.0	173.5	-57.3		280.0	572.4	253.8	38.2	1.000062
44500.0	169.3	-58.0		274.2	571.4	254.2	37.5	1.000061
45000.0	165.3	-58.7		268.5	570.4	256.1	35.8	1.000060
45500.0	161.3	-59.5		263.0	569.5	258.3	34.2	1.000059
46000.0	157.5	-60.2		257.6	568.5	260.4	33.5	1.000057
46500.0	153.7	-60.9		252.2	567.6	262.5	33.0	1.000056
47000.0	150.0	-61.6		247.0	566.6	264.6	32.3	1.000055
47500.0	146.4	-62.0		241.5	566.1	266.0	30.8	1.000054
48000.0	142.8	-62.4		236.1	565.6	267.6	29.3	1.000053
48500.0	139.3	-62.8		230.8	565.0	269.9	27.5	1.000051
49000.0	136.0	-63.2		225.6	564.5	272.9	25.4	1.000050
49500.0	132.7	-63.6		220.5	563.9	276.4	23.5	1.000049
50000.0	129.4	-63.1		214.6	564.6	277.0	21.6	1.000048
50500.0	126.2	-63.2		209.5	564.5	277.7	19.8	1.000047
51000.0	123.1	-63.9		205.0	563.6	279.9	18.1	1.000046
51500.0	120.1	-64.5		200.5	562.7	284.0	16.7	1.000045
52000.0	117.1	-65.2		196.2	561.8	288.9	15.4	1.000044
52500.0	114.2	-65.9		192.0	560.9	297.2	14.2	1.000043
53000.0	111.4	-66.5		187.8	560.0	307.4	13.3	1.000042
53500.0	108.7	-67.2		183.8	559.1	317.3	12.6	1.000041
54000.0	106.0	-67.9		179.8	558.2	327.8	11.4	1.000040
54500.0	103.4	-68.5		176.0	557.3	329.4	10.3	1.000039
55000.0	100.8	-69.2		172.2	556.4	337.4	9.4	1.000038
55500.0	98.3	-69.4		168.1	556.1	346.8	8.6	1.000037
56000.0	95.8	-69.3		163.8	556.2	357.7	8.0	1.000036
56500.0	93.4	-69.3		159.7	556.2	6.9	7.0	1.000036
57000.0	91.1	-69.3		155.7	556.3	17.4	5.6	1.000035
57500.0	88.8	-69.2		151.7	556.3	33.9	4.5	1.000034
58000.0	86.6	-69.2		147.9	556.4	81.0	1.9	1.000033
58500.0	84.4	-70.0		144.7	555.3	163.9	3.6	1.000032
59000.0	82.3	-70.8		141.7	554.2	178.2	6.9	1.000032
59500.0	80.2	-70.2		137.7	555.0	177.6	7.8	1.000031
60000.0	78.2	-69.2		133.6	556.4	177.1	8.6	1.000030
60500.0	76.3	-68.1		129.7	557.8	175.3	8.7	1.000029
61000.0	74.4	-67.1		125.8	559.2	170.0	7.4	1.000028
61500.0	72.6	-66.1		122.1	560.6	162.6	6.3	1.000027
62000.0	70.7	-65.0		118.4	562.0	157.6	5.6	1.000026
62500.0	69.0	-64.5		115.2	562.7	155.2	5.1	1.000026
63000.0	67.3	-64.4		112.3	562.8	152.3	4.6	1.000025

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GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
63500.0	65.7	-64.3		109.5	563.0	133.6	5.3	1.000024
64000.0	64.1	-63.6		106.6	563.9	118.8	6.8	1.000024
64500.0	62.6	-62.9		103.7	564.9	109.8	8.6	1.000023
65000.0	61.1	-62.2		100.8	565.8	108.0	9.6	1.000022
65500.0	59.6	-61.5		98.1	566.8	106.5	10.7	1.000022
66000.0	58.2	-60.8		95.4	567.8	105.3	11.5	1.000021
66500.0	56.8	-60.0		92.8	568.7	104.0	11.3	1.000021
67000.0	55.4	-59.3		90.3	569.7	102.7	11.1	1.000020
67500.0	54.1	-58.6		87.8	570.6	101.2	11.8	1.000020
68000.0	52.8	-57.9		85.4	571.6	99.9	14.2	1.000019
68500.0	51.5	-57.2		83.1	572.5	99.0	16.6	1.000019
69000.0	50.3	-56.5		80.8	573.5	99.9	18.1	1.000018
69500.0	49.1	-55.8		78.7	574.3	101.5	19.3	1.000018
70000.0	48.0	-55.2		76.7	575.1	102.9	20.4	1.000017
70500.0	46.8	-54.6		74.7	575.9	102.4	20.1	1.000017
71000.0	45.8	-54.0		72.7	576.7	102.0	19.7	1.000016
71500.0	44.7	-53.4		70.9	577.5	100.8	19.4	1.000016
72000.0	43.7	-52.8		69.0	578.2	98.1	19.2	1.000015
72500.0	42.6	-52.2		67.2	579.0	95.4	19.1	1.000015
73000.0	41.6	-51.6		65.5	579.8	91.8	19.5	1.000015
73500.0	40.7	-51.0		63.8	580.6	88.0	20.2	1.000014
74000.0	39.7	-51.0		62.3	580.6	84.4	21.1	1.000014
74500.0	38.8	-51.0		60.9	580.6	82.6	21.9	1.000014
75000.0	37.9	-51.1		59.5	580.6	81.7	22.7	1.000013
75500.0	37.1	-51.1		58.1	580.5	80.8	23.4	1.000013
76000.0	36.2	-51.1		56.8	580.5	80.7	24.0	1.000013
76500.0	35.4	-51.1		55.5	580.5	80.8	24.6	1.000012
77000.0	34.6	-51.2		54.2	580.4	81.0	25.1	1.000012
77500.0	33.8	-51.2		53.0	580.4	80.4	26.4	1.000012
78000.0	33.0	-51.2		51.8	580.4	79.6	28.0	1.000012
78500.0	32.2	-51.2		50.6	580.4	78.9	29.7	1.000011
79000.0	31.5	-51.3		49.4	580.3	81.1	30.8	1.000011
79500.0	30.8	-51.3		48.3	580.3	84.0	31.8	1.000011
80000.0	30.1	-51.3		47.2	580.3	87.0	32.7	1.000011
80500.0	29.4	-50.7		46.0	581.0	91.5	32.8	1.000010
81000.0	28.7	-50.1		44.8	581.8	95.9	33.1	1.000010
81500.0	28.1	-49.5		43.7	582.6	98.7	33.1	1.000010
82000.0	27.4	-48.9		42.6	583.4	100.2	32.6	1.000009
82500.0	26.8	-48.3		41.5	584.2	101.8	32.1	1.000009
83000.0	26.2	-47.6		40.5	585.0	100.7	30.7	1.000009

GEODETIC COORDINATES  
32.89927 LAT DEG  
106.40591 LON DEG

UPPER AIR DATA  
1680290105  
E-28

TABLE 15 CON'T

STATION ALTITUDE 3912.75 FEET MSL  
17 JUNE 81 1000 HRS MDT  
ASCENSION NO. 105

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
83500.0	25.6	-47.0		39.4	585.8	99.4	29.3	1.000009
84000.0	25.0	-46.4		38.4	586.6	97.6	28.8	1.000009
84500.0	24.5	-46.0		37.5	587.2	95.1	29.3	1.000008
85000.0	23.9	-45.6		36.6	587.7	92.7	29.8	1.000008
85500.0	23.4	-45.2		35.7	588.2	91.3	29.3	1.000008
86000.0	22.9	-44.8		34.9	588.7	90.0	28.5	1.000008
86500.0	22.3	-44.4		34.0	589.2	89.2	27.4	1.000008
87000.0	21.8	-44.0		33.2	589.8	90.3	24.8	1.000007
87500.0	21.4	-43.6		32.4	590.3	91.7	22.3	1.000007
88000.0	20.9	-43.2		31.6	590.8	93.3	20.1	1.000007
88500.0	20.4	-42.8		30.9	591.3	95.2	18.2	1.000007
89000.0	20.0	-42.4		30.1	591.8	97.5	16.3	1.000007
89500.0	19.5	-42.1		29.4	592.2			1.000007
90000.0	19.1	-41.8		28.7	592.6			1.000006
90500.0	18.7	-41.5		28.1	593.0			1.000006
91000.0	18.3	-41.2		27.4	593.4			1.000006
91500.0	17.9	-40.8		26.8	593.8			1.000006



STATION ALTITUDE 3912.75 FEET ASL  
17 JUNE 81  
ASCENSION NO. 105

MANDATORY LEVELS  
1680290105  
E-28

TABLE 16

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA		
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5318.	17.8	-6.1	19.	194.1	4.1	
800.0	7010.	15.5	-3.8	26.	216.4	4.3	
750.0	8792.	11.6	-4.0	33.	167.7	4.1	
700.0	10679.	10.4	-9.8	23.	67.6	8.2	
650.0	12690.	7.3	-14.7	19.	19.9	9.0	
600.0	14838.	4.1	-18.5	17.	327.0	7.0	
550.0	17135.	-4	-22.1	18.	308.1	6.2	
500.0	19620.	-4.6	-25.2	18.	255.9	10.3	
450.0	22314.	-10.0	-29.2	19.	320.3	8.1	
400.0	25247.	-18.1	-35.0	21.	268.7	4.0	
350.0	28470.	-26.3	-41.9	21.	313.4	6.2	
300.0	32053.	-36.3	-50.2	22.	315.9	6.7	
250.0	36117.	-46.1			312.4	5.5	
200.0	40907.	-52.9			256.4	32.2	
175.0	43707.	-57.0			254.1	38.2	
150.0	46874.	-61.6			264.5	32.4	
125.0	50560.	-63.5			278.0	19.1	
100.0	54992.	-69.4			339.8	9.1	
80.0	59357.	-70.1			177.6	7.8	
70.0	61998.	-64.6			156.0	5.4	
60.0	65102.	-61.7			107.1	10.3	
50.0	68854.	-56.3			100.2	18.3	
40.0	73565.	-51.0			85.6	20.8	
30.0	79702.	-51.3			87.1	32.7	
25.0	83632.	-46.4			97.7	28.7	
20.0	88537.	-42.4			97.1	16.6	

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

**DAT  
ILM**